

PATENT  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

(Case No. N02.2100)

In Re Application of: Rajachandran, et al. )  
 )  
 ) Examiner: Not yet assigned  
 )  
Serial No. : 10/527,675 )  
 )  
I.A. Filing Date: 09/23/2003 )  
 )  
For: Methods for Treating and Preventing ) Art Unit: Not yet assigned  
Obesity in Patients with MC4 Receptor )  
Mutations )

12/12/2005 HKAYPAGH 00000069 501116 10527675

01 EC:2617

65.00 DA

TRANSMITTAL LETTER

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:


In regard to the above-identified application,

1. We are transmitting herewith the attached:
  - a) Copy of the Notification of Missing Requirements Under 35 U.S.C. 371 in the United States of America, Dated November 9, 2005 (2 pages)
  - b) CRF Problem Report (3 pages)
  - c) Response to the Notice to File Missing Parts (1 page)
  - d) Copy of return postcard, Transmittal Letter and Declaration and Power of Attorney all originally filed with application on March 11, 2005 (5 pages)
  - e) Sequence Listing Statement Under CFR 1.821(f) (1 page)
  - f) Sequence Listing in computer readable form (1 diskette)
  - g) Return Postcard
2. The Commissioner is hereby authorized to charge \$65.00 to Deposit Account Number 501116. A duplicate copy of this sheet is enclosed.

CERTIFICATE OF MAIL UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the items described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, the 5<sup>th</sup> day of December, 2005.

Respectfully submitted,  
**NEUROGEN CORPORATION**  
35 Northeast Industrial Road  
Branford, CT 06405  
Phone: (203) 488-8201

12/5/2005  
Date

By:   
Ann Kadlecek  
Reg. No. 39,244

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DEPARTMENT NUMBER N02.2100
U.S. APPLICATION NO. (If known, see 37 CFR 1.5)		
INTERNATIONAL APPLICATION NO. PCT/US03/29916	INTERNATIONAL FILING DATE 9/23/2003	PRIORITY DATE CLAIMED 25 September 2002
TITLE OF INVENTION Methods for Preventing and Treating Obesity in Patients with MC4 Receptor Mutations		
APPLICANT(S) FOR DO/EO/US Lavanya Rajachandran, Elena Beretta and James Krause		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1 <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>2 <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>3 <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4 <input type="checkbox"/> The US has been elected (Article 31).</p> <p>5 <input checked="" type="checkbox"/> A copy of the international Application as filed (35 U.S.C. 371(c)(2))</p> <p>a <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</p> <p>b <input type="checkbox"/> has been communicated by the International Bureau.</p> <p>c <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</p> <p>6 <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).</p> <p>a <input type="checkbox"/> is attached hereto.</p> <p>b <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</p> <p>7 <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <p>a <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</p> <p>b <input type="checkbox"/> have been communicated by the International Bureau.</p> <p>c <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</p> <p>d <input type="checkbox"/> have not been made and will not be made.</p> <p>8 <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9 <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10 <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p> <p>Items 11 to 20 below concern document(s) or information included:</p> <p>11 <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12 <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13 <input checked="" type="checkbox"/> A preliminary amendment.</p> <p>14 <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</p> <p>15 <input type="checkbox"/> A substitute specification.</p> <p>16 <input checked="" type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17 <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.</p> <p>18 <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</p> <p>19 <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> <p>20 <input checked="" type="checkbox"/> Other items or information: Statement under 37 C.F.R. 1.821(f), Copy of the International Search Report</p>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO. PCT/US03/29916		ATTORNEY'S DOCKET NUMBER N02.2100	
The following fees have been submitted				CALCULATIONS PTO USE ONLY	
21.	<input checked="" type="checkbox"/> Basic national fee.....	\$300		\$ 300.00	
22.	<input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4).....	\$100		\$ 200.00	
	All other situations.....	\$200			
23.	<input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....	\$100		\$ 100.00	
	International Search Report prepared and provided to the Office.....	\$400			
	All other situations.....	\$500			
TOTAL OF 21, 22 and 23 =				\$ 600.00	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250	\$	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	- 20 =		x \$ 50	\$	
Independent claims	- 3 =	1	x \$200	\$ 200.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$	
TOTAL OF ABOVE CALCULATIONS =				\$ 800.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/3.					
SUBTOTAL =				\$ 400.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
TOTAL NATIONAL FEE =				\$ 400.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)): The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property.				\$ 40.00	
TOTAL FEES ENCLOSED =				\$ 440.00	
				Amount to be refunded:	\$
				Amount to be charged:	\$ 50.00
a.	<input checked="" type="checkbox"/> A check in the amount of \$ 390.00 to cover the above fees is enclosed.				
b.	<input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.				
c.	<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 501116. A duplicate copy of this sheet is enclosed.				
d.	<input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO:					
Ann Kadlecek			SIGNATURE		
Neurogen Corporation			Ann Kadlecek		
35 NE Industrial Road			NAME		
Branford, CT 06405			39,244		
			REGISTRATION NUMBER		

Office No. N02.2100

THE PATENT AND TRADEMARK OFFICE IMPRINT HEREON

ACKNOWLEDGES THE FILING OF:

Description of Paper and No.: 1

DT03 Rec'd PCT/PTO 11 MAR 2005

☒ Express Mail Information (2 pages);

☒ Transmittal Letter Form PTO-1390 (2 pages, 2 copies);

☒ International Patent Application (31 pages);

☒ Copy of International Search Report (4 pages);

☒ Application Data Sheet (1 page);

☒ A computer readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825 (1 diskette);

☒ Statement under 37 CFR 1.821(f) (1 page); ☒ Preliminary Amendment (6 pages);

☒ Assignment documents (4 pages); ☒ Declaration and Power of Attorney (2 pages);

☒ Information Disclosure Statement (2 pages);

☒ Form PTO-1449 Information Statement by Applicant (3 pages);

☒ 20 references listed on PTO Form 1449; ☒ Check for filing fee (\$390.00)

Name of Applicant(s): Rajachandran, et al Int. Or Serial No.: to be assigned

Date: 3/11/05 Atty or Agent: Ann T. Kadlecsek

with Express Mailing No. ER586113615US

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**PATENT**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
 (Case No. N02.2100)

In Re Application of:	Rajachandran, et al.	)	
		)	Examiner: Not yet assigned
Serial No. :	10/527,675	)	
		)	
I.A. Filing Date:	9/23/2003	)	
		)	Art Unit: Not yet assigned
For: Methods for Treating and Preventing		)	
Obesity in Patients with MC4 Receptor		)	
Mutations		)	

Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

**RESPONSE TO NOTICE TO FILE MISSING PARTS**

Dear Sir:

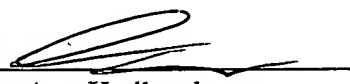
In response to the Notice to File Missing Parts dated November 9, 2005, Applicants submit herewith a replacement sequence listing in computer readable form and a copy of the Declaration originally filed with the application on March 11, 2005.

The Notice to File Missing Parts indicates that a declaration was not filed with the application. Applicants believe that this is incorrect. In addition to the copy of the originally-filed Declaration, Applicants submit herewith a copy of the accompanying transmittal letter, which notes the submission of a Declaration, as well as a copy of the return postcard indicating receipt of the Declaration by the United States Patent and Trademark Office on March 11, 2005.

Accordingly, Applicants believe that this application is complete. Early consideration of the application is requested.

Respectfully submitted,  
**NEUROGEN CORPORATION**  
 35 Northeast Industrial Road  
 Branford, CT 06405  
 Phone: (203) 488-8201

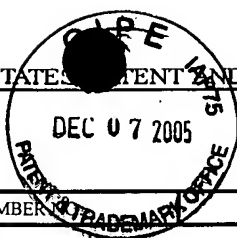
12/5/2005  
 Date

By:   
 Ann Kadlecek  
 Reg. No. 39,244

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UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

U.S. APPLICATION NUMBER	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/527,675	Lavanya Rajachandran	N02.2100

INTERNATIONAL APPLICATION NO.
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PCT/US03/29916

I.A. FILING DATE	PRIORITY DATE
09/23/2003	09/25/2002

Ann Kadlecek  
Neurogen Corporation  
35 NE Industrial Road  
Brandford, CT 06405

CONFIRMATION NO. 7306

371 FORMALITIES LETTER



\*OC000000017421324\*

Date Mailed: 11/09/2005

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 03/11/2005
- Copy of the International Search Report filed on 03/11/2005
- Preliminary Amendments filed on 03/11/2005
- Information Disclosure Statements filed on 03/11/2005
- Biochemical Sequence Diskette filed on 03/11/2005
- Biochemical Sequence Listing filed on 03/11/2005
- U.S. Basic National Fees filed on 03/11/2005
- Assignment filed on 03/11/2005
- Priority Documents filed on 03/11/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

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Total additional fees required for this application is \$65 for a Small Entity:

- \$65 Surcharge.
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov)

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

JOHN L ANDERSON

Telephone: (703) 308-9140 EXT 211

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/527,675	PCT/US03/29916	N02.2100

FORM PCT/DO/EO/905 (371 Formalities Notice)

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STIC Biotechnology Systems Branch

#5  
PCT/10

CRF Problem Report

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) experienced a problem when processing the following computer readable form (CRF):

Application Serial Number: 10/527,675  
Filing Date: 3/11/05  
Date Processed by STIC: 3/24/05

STIC Contact: Mark Spencer: Telephone: 571-272-2510; Fax: 571-273-0221

Nature of Problem:

The CRF (was):

- ☐ (circle one) Damaged or Unreadable (for Unreadable, see attached)  
☐ Blank (no files on CRF) (see attached)  
☐ Empty file (filename present, but no bytes in file) (see attached)  
☐ Virus-infected. Virus name: \_\_\_\_\_ The STIC will not process the CRF.  
☐ Not saved in ASCII text  
☐ Sequence Listing was embedded in the file. According to Sequence Rules,  
submitted file should **only** be the Sequence Listing.  
☒ Did not contain a Sequence Listing. (see attached sample)  
☐ Other: \_\_\_\_\_

PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM TO REDUCE ERRORS.  
SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

BEST AVAILABLE COPY

10/527675 2

3/11/5

yy□□□□CProject□□□□yy

(sample of submitted Patent In ".prj" project file)

see attached page (p. 3)

for "error" explanation

10/527,675 3

Please do not submit a PatentIn ".prj" file. It is a "work-in-progress" file only; you will need to submit a generated Sequence Listing. To generate one, go to "Application Steps" on PatentIn main menu. Click on "Generate Sequence Listing" and then click "Start" button. PatentIn will validate each sequence; hopefully, you will see "Successful completion" in the white box above the "Start" button.

You can then view the generated Sequence Listing by going to "Project" on main menu, and clicking on "View/Print Sequence Listing." A generated PatentIn Sequence Listing will have an ".ST25" file extension.

For further assistance, please contact Mark Spencer at 571-272-2510.